



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#5/Elec
10-8-2
Bhar

In re Application of:

Applicant: Richard A. Craig, and Anthony J. Peurrung.

S. N.: 09/771,064

Filed: 01/26/2001

For: METHOD AND APPARATUS FOR THE
DETECTION OF HYDROGENOUS
MATERIALS.

) Art Unit: 3641

) Examiner: Rick Palabrica

) Paper No: NA

) Confirmation No: 2684

) Our Ref. No: E-1825 CIP

) Date: 9/19/2002

Box NON-FEE AMENDMENT
Commissioner of Patents
Washington, DC 20231

RESTRICTION/ELECTION

RECEIVED

OCT 03 2002

GROUP 3600

Dear Sir:

Responsive to the Office Action mailed 08/27/2002, the applicant submits the following remarks in reference to the Examiner's Notice of Restriction/Election.

Remarks

1. The Examiner has required a restriction to one of the following inventions per 35 U.S.C. §121:

- I) Claims 1-15, drawn to an **apparatus**, classified in class 376, subclass 153, or
- II) Claims 16-24, drawn to a **process**, classified in class 376, subclass 159.

The Applicant acknowledges the restriction requirement and elects without traverse the Group I claims 1-15, drawn to an **apparatus**, classified in class 376, subclass 153. Accordingly, the Applicant respectfully requests cancellation of the group II process claims (16-24) to begin examination of the elected claims on the merits. The Applicant retains the right under 35 U.S.C.

§121 to file a future divisional application for the Group II process claims restricted in the current action.

2. The Examiner has also required an election under 35 U.S.C. §121 of a single species of the number and type of discriminator setting for purposes of examination.

Per 37 CFR 1.141(a), the Applicant understands that because the generic Group I claim (currently claim 1) has not yet been held to be unpatentable, all Group I claims (1-15) remain in the application pending review on the merits. In view of the Examiner's requirement, the Applicant hereby elects the discriminator species of claim 3, i.e., with at least one pulse-height discriminator setting.

3. The Examiner has also required an election under 35 U.S.C. §121 of one of the disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. In response, the Applicant elects the species of claim 7, i.e., wherein the neutron sensor comprises a coded-array aperture.

4. The Examiner has further required an election under 35 U.S.C. §121 to a single species of the neutron source for purposes of examination, due to the wide range of neutron sources disclosed and claimed as being suitable. In response, the Applicant elects the species of claim 8, i.e., wherein said neutron source is selected from the group consisting of a fission source, an (alpha, n) source, a (gamma, n) source, and combinations thereof

5. The Examiner has further required an election under 35 U.S.C. §121 to a single species of the neutron sensor for purposes of examination, due to the wide range of neutron sensors disclosed and claimed as being suitable. In response, the Applicant elects the species of claim 11, i.e., wherein said neutron sensor comprises a material selected from the group consisting of ^3He , ^{10}B , ^6Li , and combinations thereof.

6. The Examiner has further required an election under 35 U.S.C. §121 to a single species of neutron shield material for purposes of examination, due to the wide range of neutron sensors disclosed and claimed as being suitable. The Applicant elects the species of claim 13, i.e., wherein said neutron shield comprises a material selected from the group consisting of ^{10}B , ^6Li , and combinations thereof.

7. As the Group 1 invention claims have been elected in this action, no further action is required under item 7.

8. Consonant with the current requirement, the Applicant has elected species as required by the Examiner. The Applicant respectfully submits that no changes in inventorship have occurred as a consequence of the current restriction or election requirements, in compliance with 37 C.F.R. §1.48(b).

CLOSURE

Applicant has made an earnest attempt to respond in a proper manner to the Examiner's requested actions in this case. Should the Examiner identify any further requirements, he is invited to contact the undersigned for resolution thereof. Applicant respectfully requests that a timely movement toward Allowance be made in this case.

Respectfully submitted,



Stephen R. May
Reg. No. 29,255

Stephen R. May (K1-53)
Intellectual Property Services
Battelle Memorial Institute
Pacific Northwest Laboratories
P.O. Box 999
Richland, WA 99352
(509) 375-2387

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$) 0.00

Complete if Known

Application Number	09/771,064
Filing Date	01/26/2001
First Named Inventor	Craig, et al.
Examiner Name	Rick Palabrica
Group Art Unit	3641
Attorney Docket No.	E-1825 CIP

METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number: 02-1275
Deposit Account Name: Battelle Memorial Institute

☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

☒ Applicant claims small entity status. See 37 CFR 1.27

2. ☐ Payment Enclosed:

☐ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

	Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
101	740	201 370	Utility filing fee	
106	330	206 165	Design filing fee	
107	510	207 255	Plant filing fee	
108	740	208 370	Reissue filing fee	
114	160	214 80	Provisional filing fee	

SUBTOTAL (1) (\$) 0.00

2. EXTRA CLAIM FEES

Extra Claims Fee from below Fee Paid
Total Claims: -20** = X =
Independent Claims: -3** = X =
Multiple Dependent: =

	Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
103	18 203 9		Claims in excess of 20
102	84 202 42		Independent claims in excess of 3
104	280 204 140		Multiple dependent claim, if not paid
109	84 209 42		** Reissue independent claims over original patent
110	18 210 9		** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Fee Code	Large Entity (\$)	Small Entity (\$)	Fee Description	Fee Paid
105	130	205 65	Surcharge - late filing fee or oath	
127	50	227 25	Surcharge - late provisional filing fee or cover sheet	
139	130	139 130	Non-English specification	
147	2,520	147 2,520	For filing a request for ex parte reexamination	
112	920*	112 920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113 1,840*	Requesting publication of SIR after Examiner action	
115	110	215 55	Extension for reply within first month	
116	400	216 200	Extension for reply within second month	
117	920	217 460	Extension for reply within third month	
118	1,440	218 720	Extension for reply within fourth month	
128	1,960	228 980	Extension for reply within fifth month	
119	320	219 160	Notice of Appeal	
120	320	220 160	Filing a brief in support of an appeal	
121	280	221 140	Request for oral hearing	
138	1,510	138 1,510	Petition to institute a public use proceeding	
140	110	240 55	Petition to revive - unavoidable	
141	1,280	241 640	Petition to revive - unintentional	
142	1,280	242 640	Utility issue fee (or reissue)	
143	460	243 230	Design issue fee	
144	620	244 310	Plant issue fee	
122	130	122 130	Petitions to the Commissioner	
123	50	123 50	Processing fee under 37 CFR 1.17(q)	
126	180	126 180	Submission of Information Disclosure Stmt	
581	40	581 40	Recording each patent assignment per property (times number of properties)	
146	740	246 370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	740	249 370	For each additional invention to be examined (37 CFR § 1.129(b))	
179	740	279 370	Request for Continued Examination (RCE)	
169	900	169 900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 0.00

RECEIVED
OCT 03 2002

GROUP 3600

SUBMITTED BY

Name (Print/Type)	Stephen R. May	Registration No. (Attorney/Agent)	29,255	Telephone	509 375-2387
Signature	<i>Stephen R. May</i>	Date	Sept 19, 2002		

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



3641

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Applicant: Richard A. Craig, and Anthony J. Peurrung.

S. N.: 09/771,064

Filed: 01/26/2001

For: METHOD AND APPARATUS FOR THE
DETECTION OF HYDROGENOUS
MATERIALS

) Art Unit: 3641

) Examiner: Rick Palabrica

) Paper No: NA

) Confirmation No: 2684

) Our Ref. No: E-1825 CIP

) Date: 9/20/2002

CERTIFICATE OF MAILING

BOX NON-FEE AMENDMENT
Commissioner for Patents
Washington, DC 20231

RECEIVED

OCT 03 2002

GROUP 3600

Dear Sir:

The undersigned hereby certifies that the attached:

- ☒ Notice of Restriction Response to Office Action mailed 8/27/2002
- ☒ Fee Sheet (2 ea.)
- ☒ Return Receipt Postcard

are being deposited with the United States Postal Service as:

- ☒ First Class Mail
- ☐ Express Mail - Label

in an envelope addressed to Box NON-FEE Amendment, Commissioner for Patents,
Washington, DC 20231, on the date set forth below.

Rebecca B. Rupp
Signature

September 20, 2002
Date Deposited

Rebecca B. Rupp K1-53
Intellectual Property Services
Battelle Memorial Institute
Pacific Northwest Laboratories
P.O. Box 999
Richland, WA 99352
(509) 375-2536